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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,868	02/28/2001	Michel Hazard	T2146-906833	3510

181 7590 04/30/2007

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EXAMINER	
TRAN, TONGOC	
ART UNIT	PAPER NUMBER
2134	

MAIL DATE	DELIVERY MODE
04/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/763,868	HAZARD, MICHEL	
	Examiner	Art Unit	
	Tongoc Tran	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20,21,23,26-31 and 33-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20,26-29,33,37,38 and 42-45* is/are rejected.

7)☒ Claim(s) *21,23,30,31,34-36 and 39-41* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/2007 has been entered. Claims 20, 21, 23, 26, 28-31 and 33-45 have been amended. Claims 22, 24-25 and 32 have been canceled. Claims 40-45 have been added. Claims 20, 21, 23, 26-31 and 33-45 are pending.

Response to Arguments

2. Applicant's arguments filed on 1/22/2007 have been fully considered but they are not persuasive. Applicant contends that Hotley fails to teach or suggest, at minimum, verifying the datum transferred on the data bus, by the means for checking the integrity, for verifying that the specific condition is satisfied, as recited in claim 20. The means for checking the integrity is broadly recites as "being a table contained in the processing device or a plurality of software program instruction of the storage device or a specific hardware circuit". Hotley discloses ""each memory chip is constructed to include security control logic circuits which include a volatile access control memory having a plurality of access control storage elements and a programmable security access control unit containing a small number of circuits for carrying out a key validation

operation". The validation procedures encompasses the processor sending signal utilizing program instruction to the storage device via a data bus to the processor in order to read and compare the data stored therein with a predetermined specific condition (store in table) to achieve the validation process. Hotley further discloses the control access of the secure data under the condition that the validation operation is successful, thus met the claimed limitation of disabling the processing of said sensitive information by the processing device if the specific condition is not satisfied. The same rationale applies to the 35 U.S.C. rejection rejected under Geronimi et al. in view of Kommerling.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20, 29, 41 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Holtey (U.S. Patent No. 5,442,704).

In respect to claims 20 and 41, Holtey discloses a method for protecting the processing of sensitive information in a security module having a monolithic structure, comprising at least an information processing device, a storage device for storing information capable of being processed by said processing device and at least a data bus, the security module further comprising means for checking the integrity of

information and said means checking the integrity being either a table contained in the processing device or a plurality of software instructions of the storage device or a specific hardware circuit, the method comprising at least the following steps (see Abstract):

Selecting a piece of sensitive information stored in the storage device addressed by the processing device; determining, by means for checking the integrity, a specific condition for establishing the integrity of said sensitive information to be transmitted on said data bus; transferring a datum of said sensitive information from the storage device to the processing device, on said data bus; verifying said datum transferred on said data bus by said means for checking the integrity for verifying that said specific condition is satisfied (e.g. col. 3, lines 15-27); and disabling the processing of said sensitive information by the processing device if the specific condition is not satisfied (e.g. col. 3, lines 30-34). Validation process encompasses at least two software instructions of the storage means are executed by processing means for determining specific condition (e.g. col. 3, lines 15-27, i.e. reading the data in storage and reading the predetermined stored data or condition, compare the two set of data).

In respect to claims 29 and 44, the claim limitation is a system claim that is substantially similar to method claim 20 and 41. Therefore, claims 29 and 44 are rejected based on the similar rationale.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20, 26-29, 33, 37, 38, 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geronimi et al. (U.S. Patent No. 5,465,349, hereinafter Geronimi) in view of Kommerling et al. ("Design Principles for Tamper-Resistant Smartcard Processors", USENIX Worship on Smartcard Technology, May 10-11, 1999, hereinafter Kommerling).

In respect to claims 20, 26-29, 37, 38, 43 and 45, Geronimi discloses a method for protecting the processing of sensitive information in a security module having a monolithic structure, comprising at least an information processing device, a storage device for storing information capable of being processed by said processing device and at least a data bus, the security module further comprising means for checking the integrity of information and said means checking the integrity being either a table contained in the processing device or a plurality of software instructions of the storage device or a specific hardware circuit, the method comprising at least the following steps (see Abstract):

Geronimi discloses performing testing to check the environment conditions and the conditions of operation of the circuit in order to prevent fraudulent operations (see col. 2, lines 18-52 and col. 3, lines 18-40); During the processing for verifying that the

specific condition is satisfied; and disabling the processing device if the specific condition is not satisfied (see col. 2, lines 18-52 and col. 3, lines 18-40).

Geronimi does not disclose the detail of how the testing is check. However, Kommerling discloses environment attack on smartcard may alter critical machine instruction with arbitrary one (see Kommerling, 2.2.1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Geronimi's testing of environmental conditions and the condition of operation of the circuit to prevent fraudulent operations to encompass comparing verifying the critical instruction accessing by the processor to ensure that these critical instruction has not be altered during the accessing from the memory to the processor.

In respect to claim 29, the claimed invention is similar to claim 20. Therefore, claim 29 is rejected based on the similar rationale.

In respect to claims 28 and 33, Geronimi and Kommerling further disclose reading by the processing device said nonvolatile location of the storage device upon power up of said module before disabling the processing device if a value read at this location does not match (see Geronimi, col. 1, lines 50-63).

Allowable Subject Matter

5. Claims 21, 23, 30, 31, 34-36 and 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 25, 2007

KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER